



HAMILTON
 HARR - 1 R 75 - 1147
 MILL CREEK, BENSON,
 MYER & SHEPARD

PIER 16 - WEST PAD
 12" CAST-IN-PLACE
 "L" = 33' R = 40 TON

IMMEDIATELY
 AFTER LOADING
 YIELD = 10.5 TONS

0.2" / TON

Sheet #1 of 8

Pier No. 16 Abut. ~ Pier
 Sta. 201+02.24 E Pier
 Offset 4'-6" Lt. E Footer.
 Date Driven 12-8-64

Department of Highways
 Bureau of Bridges

Hamilton County
 S.H. IR-75 Sec. 9.30
 Ham-75-1147
 Br. No. _____
 Over N.B. I-75 over M.C.
 Benson St. NYCRR & Sheperd Ave.

TEST LOAD

Type of Pile 12" OD C.I.P.R.C. Spiral Weld
 L_d 50.0' L_g 32.3' Weather Fair & Cold
 Ground El. 552.00; Soil Brownish-Gray, Silty Gravelly Sand

Refer to Driving Log report for this pile Sheet #1

DATE	LOADING TIME (Hr. of Day)	INCREMENT OF LOAD (In Tons) + or -	TOTAL LOAD APPLIED (In Tons)	SETTLEMENT PER LOAD INCREMENT (Inches)	TOTAL SETTLEMENT (Inches)	REMARKS
12/14/64	4:40pm	0	0	0		
	4:45 "	+32	32	+0.100	0.100	
	5:00 "			0.008	0.108	
	5:20 "			0.003	0.111	
	5:40 "			0.002	0.113	
	6:00 "			0.001	0.114	
	6:00 "	+ 8	40	0.026	0.140	
	6:20 "			0.008	0.148	
	6:40 "			0.003	0.151	
	7:00 "			0.000	0.151	
	7:20 "			0.001	0.152	
	7:40 "			0.001	0.153	
	8:00 "			0.000	0.153	
	8:20 "			0.000	0.153	
	8:40 "			0.001	0.154	
	9:00 "			0.000	0.154	
	9:00 "	2 8	48	0.027	0.181	
	9:20 "			0.009	0.190	
	9:40 "			0.002	0.192	
	10:00 "			0.000	0.192	
	10:20 "			0.002	0.194	
	10:40 "			0.002	0.196	
	11:00 "			0.002	0.198	
	11:20 "			0.000	0.198	
	11:40 "			0.001	0.199	
12/14/64	12:00 Midnight			0.000	0.199	
12/15/64	12:20A.M.			0.000	0.199	
	12:40 "			0.000	0.199	
	12:40 "	+ 8	56	+ 0.048	0.247	OK
	1:00 "			0.000	0.247	
	1:20 "			0.001	0.248	

* Continuation of columns and Explanatory Notes on reverse side. C.R.

Pile No. _____
 Abut. ~ Pier _____
 Sta. _____
 Offset _____ R-L _____
 Date Driven _____

Department of Highways
 Bureau of Bridges

TEST LOAD

S.H. _____ County _____
 Sec. _____
 Br. No. _____
 Over _____

Type of Pile _____
 L_d _____ L_g _____ Weather _____
 Ground El. _____; Soil _____

Refer to Driving Log report for this pile

DATE	LOADING TIME (Hr. of Day)	INCREMENT of LOAD (In Tons) + or -	TOTAL LOAD APPLIED (In Tons)	SETTLEMENT PER LOAD INCREMENT (Inches)	TOTAL SETTLEMENT (Inches)	REMARKS
12/15/64-	1:40 A.M.			.002	0.250	
	2:00			.000	0.250	
	2:20			.002	0.252	
	2:40			.002	0.254	
	3:00			.001	.255	
	3:20			.002	.257	
	3:40			.001	.258	
	4:00			.000	.258	
	4:20			.001	.259	
	4:40			.002	.261	
	5:00	+8	64	.024	.285	
	5:20			.001	.286	
	5:40			.002	.288	
	6:00			.000	.288	
	6:20			.002	0.290	
	6:40			.002	.292	
	7:00			.001	.293	
	7:20			.001	.294	
	7:40			.000	.294	
	8:00			.000	.294	
	8:20			.000	.294	
	8:40			.000	.294	
	9:00			.000	.294	
	9:20			.001	.293	
	9:40			.001	.292	
	10:00			.000	.292	
	10:20			.000	.292	
	10:20	+8	72	.037	0.329	
	10:40			.002	.331	
	11:00 A.M.			.007	0.338	

* Continuation of columns and Explanatory Notes on reverse side. C.R.

Pile No. _____
 Sta. _____
 Offset _____ R-L
 Date Driven _____

Department of Highways
 Bureau of Bridges

TEST LOAD

S.H. _____ County _____
 Sec. _____
 Br. No. _____
 Over _____

Type of Pile _____
 L_d _____ L_g _____ Weather _____
 Ground El. _____; Soil _____

Refer to Driving Log report for this pile

DATE	LOADING TIME (Hr. of Day)	INCREMENT OF LOAD (In Tons) + or -	TOTAL LOAD APPLIED (In Tons)	SETTLEMENT PER LOAD INCREMENT (Inches)	TOTAL SETTLEMENT (Inches)	REMARKS
12/15/64	11:20 A.M.			- 0.001	0.337	
	11:40			+ 0.007	0.344	
	12:00 Noon			+ 0.004	0.348	
	12:20 P.M.			+ 0.001	0.349	
	12:40 P.M.			+ 0.000	0.349	
	1:00			- 0.001	0.348	
	1:20			+ 0.001	0.349	
	1:40			+ 0.001	0.350	
	2:00			0.000	0.350	
	2:20			0.000	0.350	
	2:40			0.000	0.350	
	3:00			+ 0.006	0.356	
	3:20			0.000	0.356	
	3:40			0.000	0.356	
	4:00			0.000	0.356	
	4:20			0.000	0.356	
	4:40			+ 0.001	0.357	
	5:00			0.000	0.357	
	5:20			0.000	0.357	
	5:40			+ 0.001	0.358	
	6:00			0.000	0.358	
	6:20			0.000	0.358	
	6:40	+8 Ton	80 T	0.000	0.358	
	6:40			+ 0.028	0.386	
	7:00			+ 0.004	0.390	
	7:20			+ 0.002	0.392	
	7:40			+ 0.002	0.394	
	8:00			0.000	0.394	
	8:20			0.000	0.394	
	8:40			0.000	0.394	
	9:00 P.M.			0.000	0.394	

* Continuation of columns and Explanatory Notes on reverse side.

Pile No. _____ Abut. ~ Pier _____

Department of Highways
Bureau of Bridges

S.H. _____ Sec. _____ County _____

Sta. _____

Offset _____ R-L _____

TEST LOAD

Br. No. _____

Date Driven _____

Over _____

Sheet 4 of 8
Type of Pile _____

L_d _____ L_g _____ Weather _____

Ground El. _____; Soil _____

Refer to Driving Log report for this pile

DATE	LOADING TIME (Hr. of Day)	INCREMENT OF LOAD (In Tons) + or -	TOTAL LOAD APPLIED (In Tons)	SETTLEMENT PER LOAD INCREMENT (Inches)	TOTAL SETTLEMENT (Inches)	REMARKS
12/15/64	8:20R.M.		80Ton	∕ 0.003	0.397	
"	9:40P.V.M.			0.000	0.397	
	10:00 "			∕ 0.001	0.398	
	10:20 "			0.000	0.398	
	10:40 "			∕ 0.002	0.400	
	11:00 "			0.000	0.400	
	11:20 "			- 0.001	0.399	
	11:40 "			0.000	0.399	
	12:00 Midnight			0.000	0.399	
12/16/64	12:20A.M.			∕ 0.003	0.402	
"	12:40 "			∕ 0.002	0.404	
	1:00 "			∕ 0.001	0.405	
	1:20 "			0.000	0.405	
	1:40 "	∕ 8	88	∕ 0.031	0.436	
	2:00 "			∕ 0.014	0.450	
	2:20 "			∕ 0.003	0.453	
	2:40 "			∕ 0.005	0.458	
	3:00 "			∕ 0.003	0.461	
	3:20 "			∕ 0.005	0.466	
	3:40 "			∕ 0.001	0.467	
	4:00 "			∕ 0.002	0.469	
	4:20 "			∕ 0.001	0.470	
	4:40 "			0.000	0.470	
	5:00 "			0.001	0.471	
	5:20 "			∕ 0.002	0.473	
	5:40 "			∕ 0.001	0.474	
	6:00 "			0.000	0.474	
	6:20 "			∕ 0.001	0.475	
	6:40 "			∕ 0.001	0.476	
	7:00 "			∕ 0.001	0.477	

* Continuation of columns and Explanatory Notes on reverse side. *CAF*

Sheet
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8

Pile No. _____
Abut. ~ Pier _____
Sta. _____
Offset _____ R-L _____
Date Driven _____

Department of Highways
Bureau of Bridges

TEST LOAD

S.H. _____ County _____
Sec. _____
Br. No. _____
Over _____

Type of Pile _____
L_d _____ L_g _____ Weather _____
Ground El. _____; Soil _____

Refer to Driving Log report for this pile

DATE	LOADING TIME (Hr. of Day)	INCREMENT OF LOAD (In Tons) + or -	TOTAL LOAD APPLIED (In Tons)	SETTLEMENT PER LOAD INCREMENT (Inches)	TOTAL SETTLEMENT (Inches)	REMARKS
12/16/64	7:20 A.M.		88	0.001	0.478	
"	7:40 "		"	0.000	0.478	
	8:00 "			-0.001	0.477	
	8:20 "			0.000	0.477	
	8:40 "			0.000	0.477	
	9:00 "			0.001	0.478	
	9:20 "			0.000	0.478	
	9:40 "			0.000	0.478	
	10:00 "			0.000	0.478	
	10:00 "	8	96	0.040	0.518	
	10:20 "			0.005	0.523	
	10:40 "			0.005	0.528	
	11:00 "			0.004	0.532	
	11:20 "			0.000	0.532	
	11:40 "			0.000	0.532	
	12:00 Noon			-0.002	0.530	
	12:20 P.M.			0.000	0.530	
	12:40 "			0.007	0.537	
	1:00 "			0.001	0.538	
	1:20 "			0.004	0.542	
	1:40 "			0.003	0.545	
	2:00 "			0.002	0.547	
	2:20 "			0.000	0.547	
	2:40 "			0.001	0.548	
	3:00 "			0.000	0.548	
	3:20 "			0.000	0.548	
	3:40 "			0.001	0.549	
	4:00 "			0.003	0.552	
	4:20 "			0.000	0.552	
	4:40 "			0.000	0.552	

* Continuation of columns and Explanatory Notes on reverse side.

Pile No. _____ Abut. ~ Pier _____
 Sta. _____
 Offset _____ R-L _____
 Date Driven _____

Department of Highways
 Bureau of Bridges

S.H. _____ County _____
 Sec. _____
 Br. No. _____
 Over _____

TEST LOAD

Type of Pile _____
 L_d _____ L_g _____ Weather _____
 Ground El. _____; Soil _____

Refer to Driving Log report for this pile

DATE	LOADING TIME (Hr. of Day)	INCREMENT of LOAD (In Tons) + or -	TOTAL LOAD APPLIED (In Tons)	SETTLEMENT PER LOAD INCREMENT (Inches)	TOTAL SETTLEMENT (Inches)	REMARKS
12/16/64	5:00 P.M.		96	+0.001	0.553	
	5:20			0.001	0.554	
	5:40			.000	0.554	
	6:00			.002	0.556	
	6:20			.000	0.556	
	6:40			- .001	.555	
	7:00			+ .001	0.556	
	7:20		96	0.000	0.556	
	7:20	+8	104	+0.042	.598	
	7:40			+0.011	.609	
	8:00			+ .014	.623	
	8:20			+0.008	.631	
	8:40			.003	.634	
	9:00			.005	.639	
	9:20			.000	.639	
	9:40			.008	.647	
	10:00			.003	.650	
	10:20			.002	.652	
	10:40			.003	.655	
	11:00			.003	.658	
	11:20			.002	.660	
	11:40 P.M.			.002	.662	
	12:00			.003	.665	
12/17/64	12:20 A.M.			.003	.668	
	12:40			.003	.671	
	1:00			.001	.672	
	1:20			.000	.672	
	1:40			.000	.672	
	2:00			.001	.673	
	2:20 A.M.			.001	.674	

* Continuation of columns and Explanatory Notes on reverse side. C.B.

Pile No. _____ Abut. ~ Pier _____ State of Ohio Department of Highways Bureau of Bridges S.H. _____ Sec. _____
 Sta. _____ Br. No. _____
 Offset _____ R-L _____ **TEST LOAD** Over _____
 Date Driven _____

Sheet 7 of 8

Type of Pile _____
 L_d _____ L_g _____ Weather _____
 Ground El. _____; Soil _____

Refer to Driving Log report for this pile

DATE	LOADING TIME (Hr. of Day)	INCREMENT of LOAD (In Tons) + or -	TOTAL LOAD APPLIED (In Tons)	SETTLEMENT PER LOAD INCREMENT (Inches)	TOTAL SETTLEMENT (Inches)	REMARKS
12/17/64	2:40 A.M.		104	∓ 0.002	0.676	
	3:00 " "		"	∓ 0.001	0.677	
	3:20 " "			0.000	0.677	
	3:40 " "			∓ 0.002	0.679	
	4:00 " "			∓ 0.001	0.680	
	4:20 " "			∓ 0.001	0.681	
	4:40 " "			∓ 0.001	0.682	
	5:00 " "			∓ 0.001,	0.683	
	5:20 " "	∓ 8	112	∓ 0.047	0.730	1.683 1.1 843
	5:40 " "			∓ 0.025	0.755	
	6:00 " "			∓ 0.019	0.774	
	6:20 " "			∓ 0.025	0.799	
	6:40 " "			∓ 0.018	0.817	
	7:00 " "			∓ 0.017	0.834	
	7:20 " "			∓ 0.020	0.854	←
	7:40 " "			∓ 0.008	0.862	
	8:00 " "			∓ 0.014	0.876	
	8:20 " "			∓ 0.005	0.881	
	8:40 " "			∓ 0.004	0.885	
	9:00 " "			∓ 0.035	0.920	Yield Point.
	9:20 " "			∓ 0.020	0.940	
	9:40 " "			∓ 0.019	0.959	
	10:00 " "			∓ 0.016	0.975	
	10:20 " "			∓ 0.013	0.998	
	10:40 " "			∓ 0.009	0.997	
	11:00 " "					See Note on
	11:20 " "					Last Sheet
	11:40 " "					" "
	12:00 Noon					" "
	12:20 P.M.					" "
	12:40 " "					" "

* Continuation of columns and Explanatory Notes on reverse side.

Pile No. _____ Abut. ~ Pier _____
Sta. _____
Offset _____ R-L _____
Date Driven _____

Department of Highways
Bureau of Bridges

S.H. _____ Sec. _____
Br. No. _____
Over _____

Sheet
8 of 8

TEST LOAD

Type of Pile _____
Ld _____ Lg _____ Weather _____
Ground El. _____; Soil _____

Refer to Driving Log report for this pile

DATE	LOADING TIME (Hr. of Day)	INCREMENT OF LOAD (In Tons) + or -	TOTAL LOAD APPLIED (In Tons)	SETTLEMENT PER LOAD INCREMENT (Inches)	TOTAL SETTLEMENT (Inches)	REMARKS
12/17/64	1:00 P.M.		112	/ 0.165	1.162	
"	1:20 "			/ 0.021	1.183	
"	1:40 "			/ 0.013	1.196	
	2:00 "	- 112	0	- 0.560	0.636	
	2:20 "			- 0.005	0.631	
	2:40 "			- 0.002	0.629	
	3:00 "			- 0.002	0.627	
	3:20 "			- 0.001	0.626	
	3:40 "			- 0.000	0.626	
Note: Two Ames Dials were used to determine settlement of this load. The Dials however, had only a range of one inch. At 10:40 A.M. Dec. 17, 1964 the dials reached their limit and consequently separated from the loaded pile. This was not discovered until 1:00 P.M. at which time a 3/8" steel plate was added. Therefore no record of settlement was made between this period. The readings from 1:00 P.M. Dec. 17, 1964 till the end of the load have been corrected so as not to include this plate.						

* Continuation of columns and Explanatory Notes on reverse side.

Vertical Pile ✓
 Pile No. None
 Pier 16 (West Pad) Abut. Pier
 Sta. 201+02.24=C Pier
 Offset: 4'-6" Lt. L Footer R-L ✓
 Date Driven 12/8/64

STATE OF OHIO
 DEPARTMENT OF HIGHWAYS
 Division of Design and Construction
 Bureau of Bridges

Ham I-75 County
 Sec. 9.30
 Br. No. Ham-75-1147 ✓
 Location N.B. I-75 Over
 Benson St. Mill Creek N.Y
 C.R.R. & Shepherd Ave. ✓

PILE DRIVING LOG

TYPE OF PILE: 12" OD C.I.P. R.C. Spiral Welded. ✓

Hammer: Linkbelt-Diesel #520 ✓ WH or F = 20,000 ✓ Ft. lbs.

Capacity formula: "R" = 2DF/S+0.1 ✓ Required "R" = 80,000 ✓ lbs.

Elev. of top of pile (cut-off elev.) 553.00 ✓

Elev. of nominal point of zero penetration 552.00 ✓
 40

Elev. of pile point at final penetration 519.70 ✓

(Explanatory Notes and Instructions on Reverse Side)

Penetration (feet)	Blows	"S" (inches)	Indicated "R"	Remarks
Zero	---	---	---	Elevation
0' to 6' ✓	2 Blows Total ✓			
7'	1			
8	1			Orig. Len. = 50.0' ✓
9	1			C/O = 16.7' ✓
10	2			Len. to C/O = 33.3' ✓
11	2			
12	1			NOTE: Pile Driven From Orig. Ground ✓
13	2			Elev. of 560.00 Before Exc. to
14	2			Bot. Ftr. Elev. of 552.00 ✓
15	5			
16	18	0.667	52,100# ✓	
17	11	1.091	33,600 ✓	
18	11	"	"	
19	13	.923	39,100	
20	14	.857	41,800 ✓	
21	16	.750 ✓	47,100 ✓	
22	13	.923	39,100	
23	13	"	"	
24	16	.750	47,100	
25	18	.667	52,100	
26	16	.750	47,100	
27	14	.857	41,800	
28	11	1.091	33,600	
29	12	1.000	36,400	

